Practice: 395 - Stream Habitat Improvement and Management

Scenario: #1 - Riparian Zone Improvement, Forested

Scenario Description:

This scenario describes fish and wildlife habitat improvement and/or management actions focused on the community structure and function of forested riparian zone plant communities. The planned activity meets the 395 standard, and facilitating practice standards, especially Codes 390 and 391, utilized in combination to satisfy all requirements specific to habitats needed for the stream and riparian species for which the practice is being implemented. Implementation will improve instream and riparian habitat complexity, water quality, hiding and resting cover, and/or increased food availability for desired riparian and stream species.

Before Situation:

Riparian quality and quantity are at risk as determined by the NRCS Stream Visual Assessment Protocol score of less than 5 for those elements. The site does not have adequate food, cover, and/or connectivity for riparian wildlife, and contributes insufficient amounts of organic matter andor large woody material for stream species food and cover. The site's riparian vegetation is compromised by human activities and/or access of vehicles, people, and/or livestock is not controlled adequately to protect riparian functions and stream habitat quality. Nutrients are transported to surface waters through runoff or soil erosion or to ground water from leaching in quantities that degrade water quality and limit use of intended purposes. Soil quality may be reduced due to compaction. Riparian vegetation quality and/or quantity is compromised to the extent that the riparian area and floodplain are not functioning to provide necessary stream and riparian habitat components.

After Situation:

Revegetation/reforestation of the riparian zone is completed and the vegetation community is under close management to insure long-term survival and ecological succession of the plant community. The quality and quantity of the riparian zone components of the site are managed to support a diverse vegetation community suitable for the site, the species that depend on it for habitat, and the functions it performs or will eventually perform as the vegetation matures. These functions include: stream temperature moderation thru shading, recruitment of instream large wood and/or non-woody organic matter, riparian habitat for terrestrial insects and other riparian-dependent species, streambank integrity, and filtration of contaminants from surface run-off into the stream.

Scenario Feature Measure: acres

Scenario Unit: Acre

Scenario Typical Size: 2

Scenario Cost: \$8,740.96 Scenario Cost/Unit: \$4,370.48

| Cost Details (by category): | | | | Price | | |
|-----------------------------|------|--|------|-----------|----------|------------|
| Component Name | ID | Component Description | Unit | (\$/unit) | Quantity | Cost |
| Equipment/Installation | | | | | | |
| Dozer, 80 HP | | Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included. | Hour | \$70.57 | 8 | \$564.56 |
| Backhoe, 80 HP | | Wheel mounted backhoe excavator with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included. | Hour | \$58.80 | 16 | \$940.80 |
| Labor | | | | | | |
| Supervisor or Manager | 234 | Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc. | Hour | \$36.46 | 24 | \$875.04 |
| Equipment Operators, Heavy | | Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons. | Hour | \$27.55 | 24 | \$661.20 |
| General Labor | | Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. | Hour | \$22.31 | 40 | \$892.40 |
| Materials | | | | | <u>'</u> | • |
| Tree shelter, wire mesh | | 5 feet tall, Woven Wire mesh, 6"x 6" opening or smaller, 10 gauge wire (minimum), cage placed around seedling for animal protection. Materials only. | Each | \$2.30 | 200 | \$460.00 |
| Tree, willow | 1426 | Willow tree for planting, 18" to 36" seedling. Includes materials and shipping only. | Each | \$0.67 | 200 | \$134.00 |
| Cuttings, woody, large size | 1309 | Woody pole cuttings or posts 2" to 6" in diameter and 6' long. Includes materials and shipping only. | Each | \$18.38 | 200 | \$3,676.00 |

Mobilization

| Mobilization, medium | 1139 Equipment with 70-150 HP or typical weights between | Each | \$268.48 | 2 | \$536.96 |
|----------------------|--|------|----------|---|----------|
| equipment | 14,000 and 30,000 pounds. | | | | |